

## **Wastewater Plant Operator (2821, 2822, 2823, 2824)**

### **Primary Reason Why Classification Exists**

To perform technical and skilled manual work in the operation and maintenance of the City's wastewater treatment plant

### **Distinguishing Features of the Class**

An employee in this class is responsible for operating and maintaining the City's wastewater treatment plant. Emphasis of the work is on making hourly rounds of the plant to inspect operations, entering readings into operating records, taking samples of effluent processes and performing required tests, documenting and/or repairing malfunctions, troubleshooting mechanical problems, and performing related plant work. Work includes adding required chemicals to wastewater, and troubleshooting mechanical problems. Work of the wastewater plant operator is differentiated by the level of state certification (I is lowest and IV is highest), length of experience and broader knowledge and responsibilities of plant operations, and ability to lead and train other plant personnel. Work is performed under the supervision of the Chief Wastewater Plant Operator or Wastewater Plant Superintendent and is evaluated on the basis of efficiency and cleanliness of plant operations, accuracy in tests performed and documentation, quality of treated wastewater, and observation of work in progress.

### **Illustrative Examples of Work**

- Makes regular tours of plant and inspects for the proper operation of bar screens, grit collector, engines, generators, pumps, aerators, settling tanks, filters, clarifiers, cooling, water filter, and other equipment and records readings from meters and instruments
- Regulates and adjusts motors, pumps, blowers, valves, and other apparatus based on changing operating and adverse weather conditions
- Applies chemicals to processes; observes effect on plant operations and makes adjustments
- Skims floatables from settling tanks, cleans bar screens, disposes of sand, trash, and other waste, and washes basins and cleans clarifiers
- Maintains the cleanliness and appearance of the physical plant building and grounds
- Performs minor or emergency repairs to equipment and assists plant maintenance personnel on heavy duty repairs or replacements
- Answers phones and gives information to visitors or vendors
- Cleans and maintains septic disposal pit
- Performs preventive maintenance duties as assigned

### **Knowledge, Skills, and Abilities**

- Knowledge of the operating characteristics and maintenance requirements of a wastewater treatment plant including common laboratory tests and wastewater sampling techniques
- Knowledge of the various chemicals and additives applied to wastewater to ensure compliance with federal and state treatment regulations
- Knowledge of state and federal regulations affecting wastewater treatment operations
- Knowledge of occupational and safety hazards associated with wastewater plant operations
- Knowledge of effective communication techniques when speaking with coworkers, vendors, and the public
- Ability to make operational decisions in the absence of a supervisor

- Ability to detect and resolve routine operational problems with mechanical equipment
- Ability to conduct routine wastewater tests, read meters and charts, and record results
- Ability to understand and follow moderately complex oral and written instructions
- Ability to communicate and in writing; ability to make public presentations

### **Physical Requirements**

This is heavy work requiring the exertion of 100 pounds of force occasionally, up to 50 pounds of force frequently, and up to 20 pounds of force constantly to move objects. Work requires climbing, balancing, stooping, crouching, reaching, walking, pushing, pulling, lifting, grasping, and repetitive motions. Vocal communication is required to express or exchange ideas. Hearing is required to perceive information at normal spoken word levels. Visual acuity is required for visual inspection involving small defects and/or small parts, use of measuring or testing devices, assembly of equipment, operating plant equipment, determining accuracy and thoroughness of work performed, and observing surroundings and activities. Employee must be able to perform physically demanding work such as skimming floatables from settling tanks, unstopping bar screens, disposal of sand, trash, and other waste, and washing and cleaning basins and clarifiers.

### **Working Conditions**

Work is subject to inside and outside environmental conditions including extreme heat and extreme cold. Employee is subject to noise, vibration, and hazards, including a variety of physical conditions, such as proximity to moving mechanical parts, electrical current, exposure to chemicals, and atmospheric conditions. Employee is exposed to oils and greases, sewage flows and sludge, bacteria, and blood-borne pathogens. Employee is required to wear a respirator when necessary. Employee may frequently work in close quarters, crawl space, shafts, man holes, small enclosed rooms, small sewage and water lines, and other areas which could cause claustrophobia.

### **Education and Experience**

Minimum education qualification for all levels is graduation from high school or GED equivalency. Some high school or college coursework in environmental science, physics, chemistry, hydrology, water & wastewater engineering, or related study is preferred; an Associate's degree in the physical or biological sciences may be required at higher levels of certification:

- **Wastewater Plant Operator (I)** - some experience in a wastewater treatment facility. Must be certified at the Wastewater Operator "I" level or ability to obtain within one year of employment
- **Wastewater Plant Operator (II)** - 1 - 2 years experience in a wastewater treatment facility. Must be certified at the Wastewater Operator "II" level or ability to obtain within one year of employment
- **Wastewater Plant Operator (III)** - 2 - 3 years' experience in the operation and maintenance of a wastewater treatment facility. Must be certified at the Wastewater Operator "III" level or ability to obtain within one year of employment

- **Wastewater Plant Operator (IV)** – 4 or more years' experience in the operation and maintenance of a wastewater treatment facility. Must be certified at the Wastewater "IV" level or above or ability to obtain within one year of employment

For each certification level, the years of experience may be reduced when related educational attainment is considered.

**Special Requirements**

Valid North Carolina driver license

**FLSA Status:** Nonexempt (eligible for overtime or equivalent compensatory time at 1½ times the employee's regular weekly rate for all hours worked in excess of 40 hours in the City's official work week and not the employee's work schedule)

**Disclaimer**

This classification specification has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees to perform the job. The Physical Requirements and Working Conditions section of this classification may vary from position to position and a more thorough description of these elements can be found in the employee's Position Analysis Questionnaire (PAQ). The employer reserves the right to assign or otherwise modify the duties assigned to this classification.

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